

INVASION OF THE ORBIT BY MAGGOTS*†

BY

S. P. MATHUR AND J. M. MAKHIJA

Department of Ophthalmology, R.N.T. Medical College, Udaipur, India

ORBITAL myiasis is a rarity, but may form part of a general condition in which maggots eat away the body tissues. The parasite most often affecting the eye is the larva of *Hypoderma bovis* (Hornet fly) which infests cattle (Duke-Elder, 1965). More rarely it may be the *Wohlfhartia magnifica* (Flesh fly).

The larva enter through the intact skin or conjunctival mucous membrane, by way of the contaminated fingers of the patient after handling the infested cattle or the fly itself. Beneath the skin the larvae start eating the tissues and grow into large maggots. There may be destruction of the eyeball, soft tissues, or bony orbit, and the maggots may enter the nose and surrounding tissues. This causes agonizing pain. Infestation of the orbit may first result in proptosis, which subsides as the larvae emerge through a fistula in the lid.



FIGURE.—Photograph of the patient. A maggot is visible in the sinus.

Case Report

A male Hindu farmer aged 65 was seen in the out-patients department on October 1, 1965. He had a dirty cloth tied over his right eye, and complained in his local dialect of severe pain due to "worms" in the eye. He had been working with maggot-infested cattle in his village about a week before.

Examination.—Maggots could be seen swarming through an opening on the upper lid close to the nose (Figure). A skiagram of the orbit and routine examinations of the blood, urine, and stools showed nothing abnormal. The sinus led to a large cavity extending medially and posteriorly towards the eyeball for 4.5 cm. No bony erosion was felt.

Solid oedema made it impossible to retract the upper lid.

Treatment.—He was admitted to hospital and turpentine packing was applied. Within 10 minutes, 21 maggots (the larvae of *Hypoderma bovis*) emerged from the sinus. Sterile dressings were applied and strepto-penicillin was injected. After 2 hours the patient became more comfortable, and within 2 days the cavity began to heal. The sinus closed within 10

* Received for publication October 25, 1965.

† Address for reprints: as above.

days, and the oedema of the upper lid being very much reduced we were able to examine the eye itself. There was slight conjunctival congestion, the cornea showed superficial haze, the pupil was active, and the lens cataractous. The eyeball was rotated inwards and could not be moved even with forceps, but there was perception and projection of light.

Discussion

The sequence of events was typical of the condition, and there was no difficulty in diagnosis or treatment. The prognosis is good provided tissue destruction is not too extensive and the eyeball is not invaded. The internal rotation and fixity of the eyeball in this case may have been due to irritation, inflammation, cellular infiltration, and spasm of the medial rectus muscle.

Summary

A case of orbital myiasis is described with typical signs and symptoms. Un-eventful healing followed classical treatment.

We are grateful to Dr. P. D. Mathur, M.S., F.R.C.S., F.A.C.S., Principal, R.N.T. Medical College, Udaipur for his kind permission to publish this case.

REFERENCE

DUKE-ELDER S. (1965). "System of Ophthalmology", vol. 8, part 1, p. 426. Kimpton, London.